

Claims

We claim:

5        1. A method for producing a creped nonwoven web containing thermoplastic fibers, said method comprising

          a) providing a nonwoven fibrous web having a first side and a second side, wherein the nonwoven fibrous web comprises thermoplastic fibers;

10        b) adhering the first side of the nonwoven fibrous web to a first roll by contacting the nonwoven fibrous web with the first roll using a hot melt adhesive to adhere the nonwoven fibrous web to the first roll; and

15        c) removing nonwoven fibrous web adhered to the first roll by creping the nonwoven fibrous web from first roll with a creping blade to produce a creped nonwoven web.

          2. The method of claim 1, wherein the hot melt adhesive is placed on the first roll prior to the contacting of the nonwoven fibrous web with the first roll.

20        3. The method of claim 2, wherein the hot melt adhesive is placed on the first roll by a method selected from the group consisting of printing, spraying and dipping.

25        4. The method of claim 1, wherein the hot melt adhesive is placed on the first side of the nonwoven fibrous web prior to the contacting of the nonwoven fibrous web with the first roll.

30        5. The method of claim 4, wherein the hot melt adhesive is placed on the first side of the nonwoven web by a method selected from the group consisting of printing, spraying and dipping.

          6. The method of claim 1, wherein the hot melt adhesive has a melting point in the range of about 60°C to about 200°C.

7. The method of claim 6, wherein the hot melt adhesive has a melting point in the range of about 60°C to about 125°C.

8. The method of claim 1, wherein the hot melt adhesive is applied to the  
5 nonwoven web in an amount of about 0.1 to 10% by weight, based on the weight of the nonwoven web..

9. The method of claim 8, wherein the hot melt adhesive is applied to the nonwoven web in an amount of about 1.0 to 3.5 % by weight, based on the weight of  
10 the nonwoven web..

10. The method of claim 1, wherein in the first roll comprises a smooth roll.

11. The method of claim 1, wherein the first roll is at or about ambient  
15 temperature.

12. The method of claim 1, wherein the first roll is heated above ambient temperature.

13. The method of claim 1, wherein the hot melt adhesive is hydrophobic.  
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14. The method of claim 1, further comprising

d) adhering the second side of the nonwoven web to a second roll by contacting the second side of the nonwoven fibrous web with the second roll using a hot  
25 melt adhesive to adhere the second side of the nonwoven fibrous web to the roll; and

e) removing nonwoven fibrous web adhered to the second roll by creping the nonwoven fibrous web from the second roll with a creping blade to produce a creped thermoplastic nonwoven web which is creped on both the first and second sides.

15. The method of claim 14, wherein in the second roll comprises a smooth roll.  
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16. The method of claim 14, wherein the second roll is at or about ambient temperature.

17. The method of claim 14, wherein the second roll is heated above ambient temperature.

18. A method for producing a creped nonwoven web containing thermoplastic  
5 fibers, said method comprising

a) providing an adhesive nonwoven fibrous web having a first side and a second side comprising thermoplastic fibers wherein the thermoplastic fibers comprise a thermoplastic polymer and an adhesive additive;

10 b) adhering the adhesive nonwoven fibrous web to a first roll by contacting the adhesive nonwoven fibrous web with the first roll; and

c) removing nonwoven fibrous web adhered to the first roll by creping the nonwoven fibrous web from the first roll with a creping blade to produce a creped thermoplastic nonwoven web.

15 19. The method of claim 18, wherein in the first roll is a smooth roll.

20. The method of claim 18, wherein the first roll is at or about ambient temperature.

20 21. The method of claim 18, wherein the first roll is heated above ambient temperature.

22. The method of claim 18, further comprising  
25 d) adhering the second side of the nonwoven web to a second roll by contacting the second side of the adhesive nonwoven fibrous web with the second roll; and

e) removing nonwoven fibrous web adhered to the second roll by creping the adhesive nonwoven fibrous web from the second roll with a creping blade to produce a creped thermoplastic nonwoven web which is creped on both the first and second sides.

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23. The method of claim 22, wherein in the second roll is a smooth roll.

24. The method of claim 22, wherein the second roll is at or about ambient temperature.



25. The method of claim 22, wherein the second roll is heated above ambient temperature.